

REMARKS

This responds to the Office Action dated February 22, 2008.

Claims 1-35 are amended, as a result, claims 1-35 are now pending in this application.

§102 and §103 Rejections of the Claims

In the office action dated February 22, 2008, claims 1-5, 7, 9, 27, 32 and 35 were rejected under 35 U.S.C. § 102(b) for anticipation by Hendricks (U.S. Patent No. 5,990,927; hereinafter referred to as the Hendricks reference). Claims 20 and 22-26 were rejected under 35 U.S.C. § 102(b) for anticipation by Rosser (U.S. Patent No. 6,446,261; hereinafter referred to as the Rosser reference). Claims 6, 10, 12-19, 31 and 34 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hendricks in view of Rosser. Claim 21 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Rosser in view of Butler (U.S. Patent Application Publication No. 2002/0007493; hereinafter referred to as the Butler reference). Claim 33 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Hendricks in view of Cheok (U.S. Patent No. 6,934,906; hereinafter referred to as the Cheok reference). Claims 11, 29 and 30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hendricks in view of DeRosa (U.S. Patent Application Publication No. 2006/0236340; hereinafter referred to as the DeRosa reference).

Before directly addressing the examiner's rejections, a brief review of the present disclosure is desirable. In the system disclosed in the present application, multiple video streams as well as a "presentation description" are sent to set-top boxes that are used for outputting video programming to viewers. Within each set-top box **200**, more than one video decoder (such as video decoders **220**, **224**, and **228**) can then decode multiple video streams, images, and audio simultaneously. A video controller **218** can then process the presentation description to combine the multiple video streams, images, and audio with a video-combiner **232** to create a combined video signal **236** that will be displayed as video programming to user. **Figure 3** illustrates a very useful example of the system of the present application in operation. In the example of **Figure 3**, two different background images or video (**306** and **308**) may be combined with two different automobile images or video (**302** and **304**) to create four different possible permutations of an advertisement (**310**, **312**, **314**, and **316**) that may be created for different viewers.

In the Examiner's rejections, the Examiner cited the Hendricks reference (U.S. Patent No. 5,990,927) and the Rosser reference (U.S. Patent No. 6,446,261) as the main references to reject the claims. The Applicants have carefully considered the teachings of the Hendricks reference and the Rosser reference in order to clarify the novelty of the present invention. Applicants submit that the present claims, as amended, are patentable over the Hendricks reference and the Rosser reference. Applicants hereby present a discussion of the Hendricks reference and the Rosser reference in order to high-light the novelty of the amended claims.

The Hendricks reference discloses an advanced set top terminal for cable television delivery systems. The Examiner cited Hendricks reference as anticipating a number of claims (claims 1-5, 7, 9, 27, 32 and 35) under 35 U.S.C. § 102(b). In all of these rejections, the Examiner cited heavily from the bottom of column 10 and much of column 11 in the Hendricks reference. This section of the Hendricks reference largely concerns an interactive menu system that the system of the Hendricks reference uses to display choices and allow user selections to be made. For example, the text from line 48 of column 10 to line 37 of column 11 states as follows:

Functionally, the set top terminal 220 is the last component in the delivery system chain. **The set top terminal 220 receives compressed program and control signals from the cable headend 208** (or, in some cases, directly from the operations center 202). **After the set top terminal 220 receives the individually compressed program and control signals, the signals are demultiplexed, decompressed, converted to analog signals (if necessary) and either placed in local storage (from which the menu template may be created), executed immediately, or sent directly to the television screen.**

After processing certain signals received from the cable headend 208, **the set top terminal 220 is able to store menu templates for creating menus that are displayed on a subscriber's television by using an array of menu templates.** Before a menu can be constructed, menu templates must be created and sent to the set top terminal 220 for storage. A microprocessor uses the control signals received from the operations center 202 or cable headend 208 to generate the menu templates for storage. Each menu template may be stored in volatile memory in the set top terminal 220. **When the set top terminal receives template information it demultiplexes the program control signals received from the cable headend 208 into four primary parts: video, graphics, program logic and text. Each menu template represents a different portion of a whole menu, such as a menu background, television logo, cursor highlight overlay, or other miscellaneous components needed to build a menu.** The menu templates may be deleted or altered using control signals received from the operations center 202 or cable headend 208.

Once the menu templates have been stored in memory, the set top terminal 220 can generate the appropriate menus. In the preferred embodiment, the basic menu format information is stored in memory located within the set top terminal 220 so that the microprocessor may locally access the information from the set top terminal instead of from an incoming signal. The microprocessor next generates the appropriate menus from the menu templates and the other menu information stored in memory. The set top terminal 220 then displays specific menus on the subscriber's television screen that correspond to the inputs the subscriber selects.

If the subscriber selects a specific program from a menu, the set top terminal 220 determines on which channel the program is being shown, demultiplexes and extracts the single channel transmitted from the cable headend 208. The set top terminal 220 then decompresses the channel and, if necessary, converts the program signal to an analog NTSC signal to enable the subscriber to view the selected program. The set top terminal 220 can be equipped to decompress more than one program signal, but this would unnecessarily add to the cost of the unit since a subscriber will generally only view one program at a time. However, two or three decompressors may be desirable to provide picture-on-picture capability, control signal decompression, enhanced channel switching or like features.

Thus, the system of the Hendricks reference transmits text, image and formatting information to a set-top box such that the set top box may render a menu system that allows users to view menu information and make selections from the displayed menu information. The Applicants submit that this is very similar to any web page displayed on the World Wide Web wherein text, image and formatting information is transmitted to a web client (an HTML file and supporting image files) and displayed by the web client such that a user may make selections by clicking on web links.

To distinguish over this menu system disclosed in the Hendricks reference, the applicants have amended the claims to emphasize that the claimed system is directed at system that produces video programming (television). For example, amended claim one covers a method for producing “a video signal at a set top box used for outputting video programming to at least one viewer” with a final step of “outputting said combined image as said video signal as part of said video programming to said at least one viewer”. Corresponding amendments have been made in all of the independent claims. These amendments are designed to distinguish the system for delivering video programming system of the present application over the menus system disclosed in the Hendricks reference or other similar art such as web pages rendered by web clients as set forth in the preceding paragraph.

The other main reference cited by the Examiner is the Rosser reference (U.S. Patent No. 6,446,261). The Rosser reference discloses a set top device for target electronic insertion of indicia into video. Specifically, the Rosser reference discloses a Live Video Insertion System (LVIS) that has been split into two functional parts. An upstream “master” portion performs geometric recognition and occlusion mask generation on a main video feed. And a downstream “slave” portion in a set-top box receives the geometric information and occlusion mask information such that it may warp and insert text and video into defined region of the main video feed. Live Video Insertion Systems (LVIS) are familiar to baseball and football fans as such systems are used to place advertisements behind batters at the plate and place insignias on football fields during sports programming.

The amended independent claims of the present disclosure cover a different invention than the Live Video Insertion System (LVIS) disclosed in the Rosser reference. A first distinction is that the present claimed system does not simply operate on a main video feed that simply becomes slightly modified as taught in the Rosser reference. For example, referring to **Figure 2** of the Rosser reference, a main baseband video signal **84** is extracted and passed to a delay line **86** and a Vertical Blanking Interval (VBI) decoder **80**. The VBI decoder **80** extract additional information such as model information **88**, occlusion mask **87**, and video insertion **90**, and text data **92**. The system of the Rosser reference then slightly modifies the main baseband video signal **84** that has passed through delay line **86** using a multiplexer **102** and the additional information extracted from the VBI (the model information **88**, occlusion mask **87**, and video insertion **90**, and text data **92**) as processed with a warp unit **100**. (See **Figure 2** of the Rosser reference.) Instead of slightly modifying a main baseband video signal as set forth in the Rosser reference, the presently claimed system may operate on images that are not meant to be viewed independently such as the two different background images (**306** and **308**) and two different automobile images (**302** and **304**) in the example of **Figure 3** in the present invention. For example, claim operates on “a first image stored in memory of said set top box, said first image not intended to be displayed independently” (such as background images **306** and **308**) and a “second image stored in said memory of said set top box, said second image not intended to be displayed independently” (such as automobile images **302** and **304**) to create wholly new

combined images such as advertisement images **310, 312, 314, and 316**. Corresponding amendments exist in all the amended independent claims.

A second significant difference between the present disclosure as claimed in the amended independent claims and the system of the Rosser reference is that the system of the present application uses a presentation description comprising a set of directions in order to have a flexible expandable system that will allow a large amount of creative license. For example, amended independent claim 1 “accessing a presentation description comprising a set of instructions that define a portion of said first image and that defines the manner in which said portion of said first image and a portion of said second image are combined, the manner in which the images are combined being selected from at least one of a plurality of manners of combinations, and the presentation description instructions also defining a sequence of operations performed over time.” This difference is explicitly described in the specification in a paragraph from line 23 of page 7 to line 9 of page 8:

The presentation description may take the form of a markup language wherein the format, look and feel of a video image is controlled. Using such a language, the manner in which two or more video images are combined may be fully defined. The language may be similar to XML, HTML or other graphical mark-up languages and allow certain video functions such as pixel by pixel replacement, rotation, translation, and deforming of portions of video images, the creation of text and other graphical elements, overlaying and ghosting of one video image with another, color key replacement of one video image with another, and any other command as may be contemplated. **In contrast to hard-coded image placement choices typical to picture-in-picture (pIP) display, the presentation description of the present invention is a "soft" description that provides freedom in the manner in which images are combined and that may be easily created, changed, modified or updated.** The presentation is not limited to any specific format and may employ private or public formats or a combination thereof. Further, the presentation description may comprise a sequence of operations to be performed over a period of time or over a number of frames. In other words, the presentation description may be dynamic. For example, a video image that is combined with another video image may move across the screen, fade in or out, may be altered in perspective from frame to frame, or may change in size.

By comparison, the system of the Rosser reference only allows for the integration of an image or text into the main baseband video **84** using its multiplexor **102**. The system of the Rosser reference has no set of instructions, no specifying how images may be combined in various manners selected from a plurality of manners, and no defining of a sequence of operations to be

performed over time as set forth in every amended independent claim in the present application. The system of the Rosser reference only disclose the hard-wired system of warping an image or text into the baseband video **84** as illustrated in hardware of **Figure 2**.

The remaining references cited by the examiner: Butler (U.S. Patent Application Publication No. 2002/0007493), and Cheok (U.S. Patent No. 6,934,906), and DeRosa (U.S. Patent Application Publication No. 2006/0236340) all merely contain various elements cited in dependent claims.

Summary

In the office action dated February 22, 2008, applicants have amended the claims to distinguish the patentable aspects of the present disclosure over the references cited by the Examiner. As set forth above, the amended independent claims all include various elements not taught by the Hendricks reference, the Rosser reference, nor any combination of those two references. Specifically, the amended independent claims are directed toward a system that sends images that are not intended to be displayed independently along with a set of presentation description directions that are processed in order to render a wholly new combined video signal for output as video programming to a viewer. The dependent claims include all the limitations of the independent claims and are thus likewise allowable.

Serial Number: 10/609,000

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Title: Video combiner

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney 408-278-4041 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. Box 2938
Minneapolis, MN 55402
408-278-4041

Date 5/22/2008

By /s/ Dag Johansen

Dag Johansen
Reg. No. 36,172

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 22 day of May 2008.

Name

Signature